CLAIMS

I claim:

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- 1) An aiming device for a projectile launcher, comprising:
- a) first and second light bending elements which are concentrically aligned;
- b) a rotation mechanism which allows counter rotation of said first and second light bending elements relative to one another in a synchronous manner such that a line of sight through the aiming device moves along a substantially straight vertical line as said rotation mechanism is rotated;
- c) a calibration element associated with said rotation mechanism which indicates the amount of rotation of said rotation mechanism that causes said line of sight to pass through the point where a projectile launched by the projectile launcher will be when it reaches a particular distance from the projectile launcher.
- 2) The aiming device of claim 1 wherein said light bending elements are wedge-shaped prisms.
- 3) The aiming device of claim 1 wherein said rotation mechanism allows both of said light bending elements to be rotated 180 degrees.
- 4) The aiming device of claim 1 wherein said light bending elements are located in an elongate tubular shell.

- 5) The aiming device of claim 1 wherein light bending elements are mounted in two rotatable rings and the light bending element in one ring is equal to the light-bending element in the other ring.
- 6) The aiming device of claim 5 wherein said rotation mechanism comprises of one or more cable-like linkages between said rotatable rings.

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- 7) The aiming device of claim 6 wherein said one or more cable-like linkages include two or more rollers to change the direction of the tension of said cable-like linkages.
- 8) The aiming device of claim 5 wherein the said rotation mechanism comprises said rotatable rings having gear-like ridges that facilitate the synchronization of concentric opposite rotation of said rotatable rings.
- 9) The aiming device of claim 8 wherein said rotation mechanism comprises gear-like linkage between said rotatable rings.
- 10) The aiming device of claim 9 wherein said gear-like linkage includes one gear-like link.
- 11) The aiming device of claim 9 wherein said gear-like linkage includes more than one gear-like link.
- 12) The aiming device of claim 11 wherein the gear-like linkage is staggered in relationship to the rotatable rings such that at least one or more of the gear-like linkages is not in the same phase of engagement with said gear-like ridges.

13) The aiming device of claim 5 wherein said rotation elements include friction engagement elements which facilitate the synchronization of the concentric opposite rotation of said rings.

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- 14) The aiming device of claim 13 wherein said friction engagement elements include rollers.
 - 15) The image-moving device of claim 14 wherein there is one of said rollers.
- 16) The image-moving device of claim **14** wherein there are more than one of said rollers.
- 17) The device of claim 5 wherein said rotation elements include a ridged linkage which synchronizes the concentric opposite rotation of said rings.
- 18) The device of claim 17 wherein said ridged linkage is linked to a common point that when moved causes a synchronized and concentric opposite rotation of said rings.